FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: July 9, 1996 Date Received: July 3, 1996

Project: Metro Self Monitor, PO #M72406 Date Samples Extracted: July 5, 1996 Date Extracts Analyzed: July 8, 1996

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, AND ZINC USING METHOD 6010

Samples Processed Using Method 3005A Results Reported as mg/L (ppm)

Sample ID	Chromium	Copper	<u>Nickel</u>	<u>Zinc</u>
M72406	0.55	0.60	0.61	0.06
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

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Date of Report: July 9, 1996 Date Received: July 3, 1996

Project: Metro Self Monitor, PO #M72406

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 70470 (Duplicate)

Analyte:	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	n mg/L (ppm)	0.55	0.52	6	0-20
Copper	mg/L (ppm)	0.60	0.56	7	0-20
Nickel	mg/L (ppm)	0.61	0.59	3	0-20
Zinc	mg/L (ppm)	0.06	0.05	18a	0-20

Laboratory Code: 70470 (Matrix Spike)

	Reporting	Spike	Sample	% I	Recovery	Acceptance	Relative e Percent
Analyte:	Units	Level	Result	MS	MSD	Criteria	<u>Difference</u>
Chromium	mg/L (ppm)	5	0.55	101	98	80-120	3
Copper	mg/L (ppm)	5	0.60	100	98	80-120	2
Nickel	mg/L (ppm)	10	0.61	97	98	80-120	1
Zinc	mg/L (ppm)	5	0.06	97	99	80-120	2

Laboratory Code: Spike Blank

	Reporting	Spike	% R	ecoverv	Acceptance	Relative e Percent
Analyte:	Ûnits	Level	MS	MSD	Criteria	Difference
	445. JPT JS					
Chromium	mg/L (ppm)	5	102	108	80-120	6
Copper	mg/L (ppm)	5	103	105	80-120	2
Nickel	mg/L (ppm)	10	101	106	80-120	5
Zinc	mg/L (ppm)	5	102	106	80-120	4

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

a - The analyte was detected at a level less than five times the detection limit. The RPD results may not provide reliable information on the variability of the analysis.

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ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D Beth M. Albertson, M.S. Bradley T. Benson Kelley D. Wilt 3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044

July 9, 1996

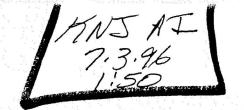
INVOICE # 96ACU0709-1 DUPLICATE COPY

Accounts Payable Alaskan Copper Works 628 South Hanford Seattle, WA 98134

RE: Project Metro Self Monitor, PO #M72406: Results of testing requested by Gerry Thompson, Project Manager for material submitted on July 3, 1996.

1 water sample analyzed for			
Chromium, Copper, Nickel, and Zinc			
using Method 6010 @ \$65 per sample		<u>\$ 65.00</u>	
Amount Due		\$ 65.00	

ERIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282



SAMPLE CHAIN OF CUSTODY

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City, State, Zip Seat	tle. WA 981	3.4			· · · · · · · · · · · · · · · · · · ·	······································	
Phone # (206) 38	2-8375 Fax	(206) 382	-7335	Date	7-3-96		
SITE NO.	· ·	PROJ	ECT NAME		PL	JRCHASE ORDER	\ <i>\</i>
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REMARKS						DISPOSAL INFOR	MATION
					Ret	spose after 30 day surn Samples Il for Instructions	
Sample #	Date/Time Sampled	Type of Sample	# of Jars	Lab Sample i		Analyses Requested	
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09/19/94

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July 9, 1996

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford Seattle, WA 98134

Dear Mr. Thompson:

Enclosed are the results from the testing of material submitted on July 3, 1996 from your Metro Self Monitor, PO #M72406 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Kurt Johnson Chemist

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Enclosures ACU0709R.DOC